

Amendments to the Specification

Please replace the paragraph that begins on line 28 of page 1 and continues through to line 2 of page 2 with the following amended paragraph:

The use of certain bioabsorbable polymers as coatings to improve the ~~ti edown~~ tie-down performance of sutures and to also reduce tissue drag is similarly known in this art. These coatings may include copolymers and blends containing monomers of lactide, glycolide, ~~[[]]~~ epsilon-caprolactone, trimethylene carbonate, p-dioxanone, ethylene oxide, and propylene oxide.

Please replace the following paragraph, lines 1-10 on page 5, with the following new paragraph:

Yet another aspect of the present invention is a coated bioabsorbable medical device. The device has _____
a first member having a first contact surface and a second member having a second contact surface. The second member engages the first member such that the first and second contact surfaces are approximated. A bioabsorbable coating is disposed on at least a portion of the second contact surface such that said coating engages the first contact surface. Optionally, the first contact surface also has a bioabsorbable coating disposed on at least a portion thereof.

Please replace the following paragraph, lines 27-30 on page 5, with the following new paragraph:

FIG. 3 is a perspective view of a bioabsorbable implantable ligament repair device of the present invention having bioabsorbable lubricating coatings on its dragging surfaces in accordance with a second exemplary embodiment of the invention.

Please replace the following paragraph, lines 1-27 on page 10, with the following new paragraph:

The bioabsorbable medical devices of the present invention having contact surfaces will be made from conventional biocompatible, bioabsorbable polymers. They may be organic or inorganic, synthetic or natural. Examples of suitable biocompatible bioabsorbable polymers include biopolymers such as aliphatic polyesters, poly(amino acids), copoly(ether-esters), polyalkylenes oxalates, polyamides, poly(ethylene glycol), poly(iminocarbonates), polyorthoesters, polyoxaesters, polyamidoesters, polyoxaesters containing amine groups, poly(anhydrides), polyphosphazenes, biomolecules, and copolymers and blends thereof. For the purpose of this invention, aliphatic polyesters include but are not limited to homopolymers and copolymers of lactide (which includes lactic acid, D-, L- and meso lactide), glycolide (including glycolic acid), ϵ -caprolactone, paradioxanone (1,4-dioxan-2-one), trimethylene carbonate (1,3-dioxan-2-one), alkyl derivatives of trimethylene carbonate, monoglyceride polyesters, δ -valerolactone, β -butyrolactone, γ -butyrolactone, ϵ -decalactone, hydroxybutyrate, hydroxyvalerate, 1,4-dioxepan-2-one (including its dimer 1,5,8,12-tetraoxacyclotetradecane-7,14-dione), 1,5-dioxepan-2-one, 6,6-dimethyl-1,4-dioxan-2-one 2,5-diketomorpholine, pivalolactone, alpha, alpha-diethylpropiolactone, ethylene carbonate, ethylene oxalate, 3-methyl-1,4-dioxane-2,5-dione, 3,3-diethyl-1,4-dioxan-2,5-dione, 6,8-dioxabicyclooctane-7-one and polymer blends thereof. The biocompatible, bioabsorbable inorganics include ceramics composed of mono-, di-, tri-, ☐ alpha-tri, ☐ beta-tri, and tetra-calcium phosphate, hydroxyapatite, fluoroapatites, calcium sulfates, calcium fluorides, calcium oxides, calcium carbonates, magnesium calcium phosphates, bioglasses, and mixtures thereof. The devices of the present invention may also be made of composites of conventional bioabsorbable polymers and bioabsorbable inorganics. The devices of the present invention may additionally be made from natural biopolymers including collagen, elastin, alginate, chitin, hyaluronic acid, mono-, di- and polysaccharides, and gelatin.

Please replace the following paragraph, lines 20-24 on page 12, with the following new paragraph:

The biocompatible, bioabsorbable inorganics include fine powders of ceramics composed of mono-, di-, tri-, ☐ alpha-tri, ☐ beta-tri, and tetra-calcium phosphate,

hydroxyapatite, fluoroapatites, calcium sulfates, calcium fluorides, calcium oxides, calcium carbonates, magnesium calcium phosphates, bioglasses, and mixtures thereof.

Please replace the following paragraph, lines 26-30 on page 12, with the following new paragraph:

Particularly preferred coating materials are bioabsorbable aliphatic polyester waxes made by the polycondensation of monoalkanoyl glycerides and common dicarboxylic acids (MGPEs=monoglyceride polyesters). These ☐ MGPE's have an aliphatic polyester backbone with pendant fatty acid ester groups and exhibit relatively low melting points ($T_m < 100^\circ\text{C}$).

Please replace the following paragraph, lines 1-7 on page 13, with the following new paragraph:

A second preferred coating material is a copolymer of ☐ epsilon-caprolactone and glycolide and glycolic acid. This composition is more fully discussed in U.S. Patent No. 4,994,074, issued February 19, 1991, the disclosure of which is hereby incorporated herein by reference. It is biocompatible and bioabsorbable, and approved by the FDA as a suture coating. Another preferred copolymer from this family of copolymers is a copolymer of 90% ☐ epsilon-caprolactone and 10% glycolic acid.

Please replace the following paragraph, lines 12-17 on page 14, with the following new paragraph:

Conventional coating techniques such as solution coating, powder coating and melt coating can be applied to coat the devices. An example for the copolymer of ☐ epsilon-caprolactone and glycolide and glycolic acid is solution coating. The coating polymer can be dissolved in an organic solvent such as ethyl acetate. Solution coating techniques such as dip coating, spraying, can then be used to coat the implantable medical devices.

Please replace the following paragraph, lines 4-26 on page 16, with the following new paragraph:

A coating for the sheath expanding members 260 of the graft ligament anchor system 200 was then prepared. The coating was a copolymer of 90% ϵ -caprolactone and 10% glycolic acid (Ethicon Incorporated, Somerville, NJ) with an I.V. of 0.45 dL/g as measured in hexafluoroisopropanol (HFIP) at 25°C dissolved in ethyl acetate to a solution concentration of 7.5%. The coating was applied using a spray apparatus as described above. The x-table moving speed was set at 0.45 mm/sec. The rotating speed was set at 46 RPM. The distance of the spray nozzle was 1 inch from the outer threads of the expansion member 260. The spray gun (Model 150, Badger Air-Brush Co., Franklin Park, IL) opening setting was two rotations away from the minimum opening. A first sheath expanding member 260 was sprayed from the distal end to the proximal end and back, resulting in two passes of the sheath expanding member 260 through the spray nozzle. A second sheath expanding member 260 was sprayed as above, except the two-pass method was repeated three more times, resulting in eight passes of the member 260 through the spray nozzle. The coated devices were then put under vacuum at room temperature for one hour to remove the solvent. The amounts of coating were calculated by measuring the weights of the respective members 260 prior to and after the coating/drying steps. The sheath expanding member 260 which passed through the spray nozzle two times was coated with 1.0 milligram of coating, while the member 260 which passed through the spray nozzle eight times was coated with 4.5 milligrams of coating. These weights of coating represented between 0.065 and 0.290 weight percent of the coating/ sheath expanding member 260 combination, respectively, for the two coated members 260 elements.